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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,229	10/04/2001	Susie J. Wee	HP-10016300	4644

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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Fort Collins, CO 80527-2400

EXAMINER

SHIFERAW, ELENI A

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/972,229

Applicant(s)

WEE ET AL.

Examiner

Eleni A. Shiferaw

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/04/2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Final Rejection

Response to Arguments

1. Applicant arguments with respect to claims 1-39 filed on October 04, 2001 have been fully considered but are not persuasive. The examiner would like to point out that this action is made final (MPEP 706.07a).

Terminal Disclaimer

2. The terminal disclaimer filed on April 27, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Application no: 09849794 has been reviewed and is NOT accepted.

The terminal disclaimer was not signed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 10-19, 23-32, and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. (Nakagawa Patent No.: US 6,810,131 B2) in view of Perlman et al. (Perlman Patent Number 6,055,316).

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As per claims 1, 14, and 27 Nakagawa teaches a device/method for encoding and encrypting data, said device comprising:

a segmenter adapted to receive said data and segment at least a portion of said data into regions (Nakagawa Fig. 15 No. 1100 and 1200);

a scalable encoder coupled to said segmenter, said scalable encoder adapted to scalably encode at least one of said regions into scalably encoded data (Nakagawa Fig. 19, encoding side); and

a encrypter, said encrypter adapted to encrypt said scalably encoded data into encrypted scalably encoded data (Nakagawa Fig. 15 No. 1108, and col. 3 lines 44-48).

Nakagawa does not explicitly teach the encrypter is progressive encrypter.

Perlman teaches a progressive encrypter encrypts at least a portion of data (Perlman Fig. 2 and col. 6 lines 26-60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Perlman within the system of Nakagawa because it would allow to provide at least some content to everyone, even if users are not going to pay the full version. This way, the content provider can send low quality “previews” to a larger viewing audience (see Perlman col. 1 lines 66-col. 2 lines 12). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Perlman within the system of Nakagawa to progressively encrypt

portions of the scalably encoded data and generate progressively encrypted scalably encoded data because it would allow data to be streamed to heterogeneous client receiving nodes that may have different display, power, communication and computational capabilities and characteristics.

As per claims 2, 15, and 28, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said device is coupled to a packetizer, wherein said packetizer is adapted to receive said progressively encrypted scalably encoded data in real time as said progressively encrypted scalably encoded data are output from said progressive encrypter (Fig. 15 No. 1302).

As per claims 3, 16, and 29, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method comprising: a storage unit coupled to said progressive encrypter, said storage unit adapted to store said progressively encrypted scalably encoded data (Nakagawa Fig. 15 No. 1105, and see also Perlman col. 12 lines 21-24).

As per claims 4, 17, and 30, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said device is coupled to a packetizer, wherein said packetizer is adapted to receive at least a portion of said progressively encrypted scalably encoded data stored in said storage unit (Nakagawa Fig. 15 No. 1302).

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As per claims 5, 18, and 31, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said data are selected from the group consisting of: video data, audio data, image data, graphic data, and web page data (Nakagawa Col. 2 lines 42-45).

As per claims 6, 19, and 32, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said segmenter is adapted to receive prediction error video data (Nakagawa Col. 17 lines 61-66).

As per claims 10, 23, and 36, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method comprising: a video prediction unit coupled to said segmenter, said video prediction unit adapted to generate prediction error video data (Nakagawa Col. 17 lines 61-66).

As per claims 11, 24, and 37, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said scalable encoder is adapted to encode said at least one of said regions into scalable data and into header data, wherein said header data provide information corresponding to said scalable data (Nakagawa Col. 16 lines 17-27).

As per claims 12 and 25, and 38 both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said progressive

encrypter is adapted to encrypt said header data (Nakagawa Col. 16 lines 17-27).

As per claims 13, 26, and 39 both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said header data comprise information allowing a transcoder to transcode said progressively encrypted scalably encoded data without decrypting and decoding said progressively encrypted scalably encoded data (Nakagawa Col. 16 lines 17-27).

5. Claims 7-9, 20-22, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. (Nakagawa Patent No.: US 6,810,131 B2) in view of Perlman et al. (Perlman Patent Number 6,055,316), and in further view of Van der Auwera et al. (Van Patent No.: US 6,532,265 B1).

As per claims 7-9, 20-22, and 33-35 both Nakagawa and Perlman teach all the subject matter as described above. Nakagawa and Perlman do not explicitly teach segmenting said data into rectangular regions, non-rectangular regions, and overlapping regions.

Van teaches segmenting said data into corresponding rectangular regions, non-rectangular regions, and overlapping regions (Van col. 2 lines 20-28).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Van within the combination system of

Nakagawa and Perlman because it would allow to decrypt data without waiting for the whole data to be received by the receiver and perform easier encoding and encrypting/decrypting system.

6. Applicant argues:

- a. The cited references do not teach the combination of progressively encrypting scalable encoded data, nor would the combination of said references have been obvious (pages 3-5).
- b. The dependent claims are allowable based on their dependency upon the independent claims (pages 5-6).

However, Examiner disagrees with applicant.

Regarding argument (a), both prior art references, Nakagawa and Perlman, are classified in analogous art. i.e., class 380, Video Cryptography. This provides some motivational support for combining two references in like arts. The office has decided the invention is not patentable because the cited references are analogous art. To further support the motivation, a single reference that put both concepts together is provided by the examiner. The single reference, Al-Jabri et al. teaches both scalable coding of data and further progressively encrypting the scalable coded data. Scalable encoding is shown in Al-Jabri et al. On pages 505-506, section 2. Progressive encryption is shown in Al-Jabri et al. on pages 507-508, section 3.1. To this extent, the pending claims are rejected by the combination of Nakagawa et al. in view of Perlman et al., and further shown to be an obvious combination by Al-Jabri et al.

Regarding argument (b), examiner disagrees with applicant. Based on the arguments set forth by the examiner for argument (a), the dependent claims stand as rejected.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. A. Kh. Al-Jabri and a. Kh. Al-Asmari, "secure Progressive Transmission of Compressed Images", IEEE Trans. On Consumer Electronics, Vol. 42, No. 3, pp. 504-512, August 1996 is being cited to further support the motivation for combining Nakagawa et al. and Perlman et al. Al-Jabri et al. teaches scalable coded data that is further secured by several encryption methods—one of which is progressive encryption.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

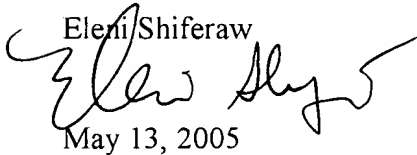
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni A Shiferaw whose telephone number is 571-272-3867. The examiner can normally be reached on Mon-Fri 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eleni Shiferaw



May 13, 2005



AYAZ SHEIKH

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100